

Work Order ID 142907

Monday, March 21, 2016 7:57:12 AM

142907

Page 1

Item ID: D3805-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Plate
Start Date: 3/29/2016 Start Qty: 8.00 ***8*** Cust Item ID:
Required Date: 4/1/2016 Req'd Qty: 8.00 ***8*** Customer:
Reference:

Approvals: Process Plan: W Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3805	C								

105

0.00

105

Purchasing

Purchasing

Memo

ISSUE PO 31764
CUT PER DRWG D3805 REV.C

0.00

8 MAR 21 2016DAS
13
9-89

115

Receive & Inspect for Damage & Mat'l Certs

0.00

115

Packaging

Packaging

Memo

0.00

DR Sep 16-047

125

QC5- Inspect part completeness to step on W/O

0.00

125

QC

Quality Control

Memo

0.00

P.T.O.

DQA: ant Date: 2016-10-7

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: ant Date: OCT 03 2016Work Order update only ☐

Work Order: <u>142907</u> Part No. <u>D3805-1</u> NCR No. <u>16-6026</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS			
		Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐	Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐	Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☒	Engineering ☐ Quality ☐ Other ☐
Date: <u>16-04-15</u>	Step #: <u>105</u>	QTY Effective: <u>8</u>		MRB (QSI042) Approval DAS 9 9-89 <u>16-04-20</u>	
Description Work Order Deviation		Disposition		Completed By	
During inspection some dimension where found out tolerance. See attach F.A.I. R.C. equipment		Scrap. + destroy.		DAS 38 9-89 <u>MAY 04 2016</u>	
				Lead hand / Supervisor Approval Verification DAS 9 9-89 <u>16-05-04</u>	
				QC / QA Coordinator Approval DAS 9 9-89 <u>16-05-04</u>	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☒ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☒ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
		OTHER :			

Work Order ID 142907

Monday, March 21, 2016 7:57:12 AM

142907

Page 2

Item ID: D3805-1

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Plate

Start Date: 3/29/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 4/1/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
Brake NC	Memo	0.00							
Brake NC	Form as per Dwg D3805 using Jigs DT8261 and DT8326								
140	QC5- Inspect part completeness to step on W/O	0.00							
140									
QC	Memo	0.00							
Quality Control									
150	Identify as per dwg & Stock Location: _____	0.00							
150									
Packaging	Memo	0.00							
Packaging	LOCATION WA001								

Work Order ID 142907

Monday, March 21, 2016 7:57:12 AM

142907

Page 3

Item ID: D3805-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Plate

Start Date: 3/29/2016 Start Qty: 8.00

8

Cust Item ID:

Required Date: 4/1/2016 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.01

Quality Control

MS
φ
MAY 04 2016

Picklist Print

Monday, March 21, 2016 7:57:11 AM

Page 1

Work Order ID: 142907

142907

Parent Item: D3805-1

D3805-1

Parent Item Name: Plate

Start Date: 3/29/2016

Required Date: 4/1/2016

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 08-07-15 new issue DD verified by:EC
IPP Rev:B 08-07-30 redesign flat pattern DD verified by:EC
IPP Rev:C 08-09-23 redesign flat pattern DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3805-1P		Purchased	No				Each	0.0000		8			
D3805-1P									**				
Plate													
M304S18GA		Purchased	No			100	sf	269.4960	1.862	15.68		APR 01 2016	DAS 13 8:59
M304S18GA									**				
304/316 .050 Sheet													

Location

Loc Qty

Loc Code

MAT020

269.496

M133328

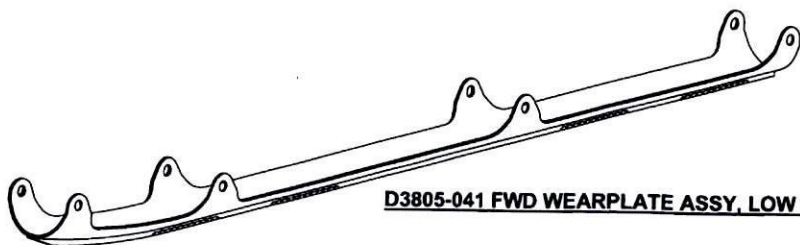
171.996

M133587

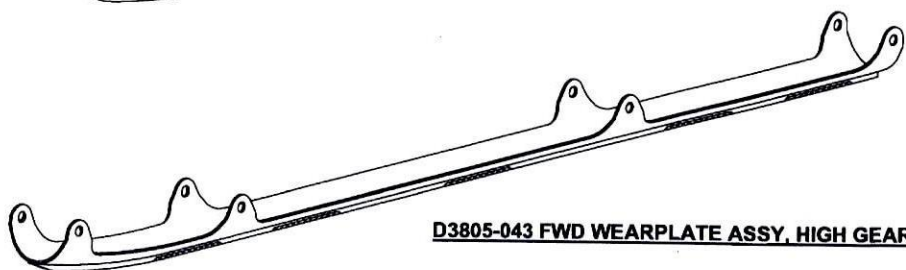
97.5

m134604

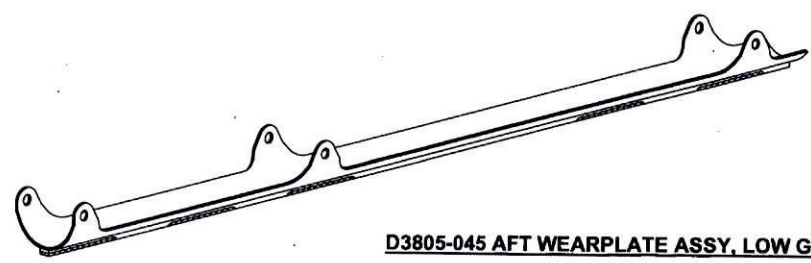
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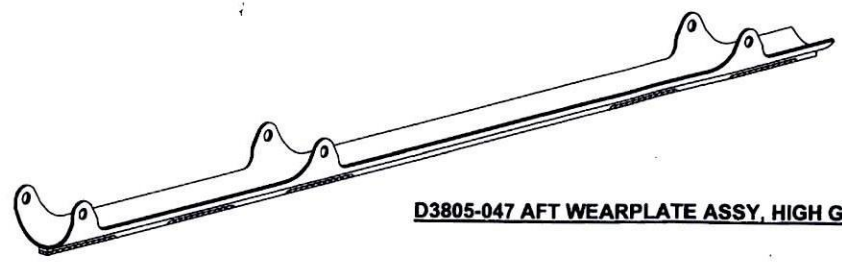
D3805-041 FWD WEARPLATE ASSY, LOW GEAR



D3805-043 FWD WEARPLATE ASSY, HIGH GEAR



D3805-045 AFT WEARPLATE ASSY, LOW GEAR



D3805-047 AFT WEARPLATE ASSY, HIGH GEAR

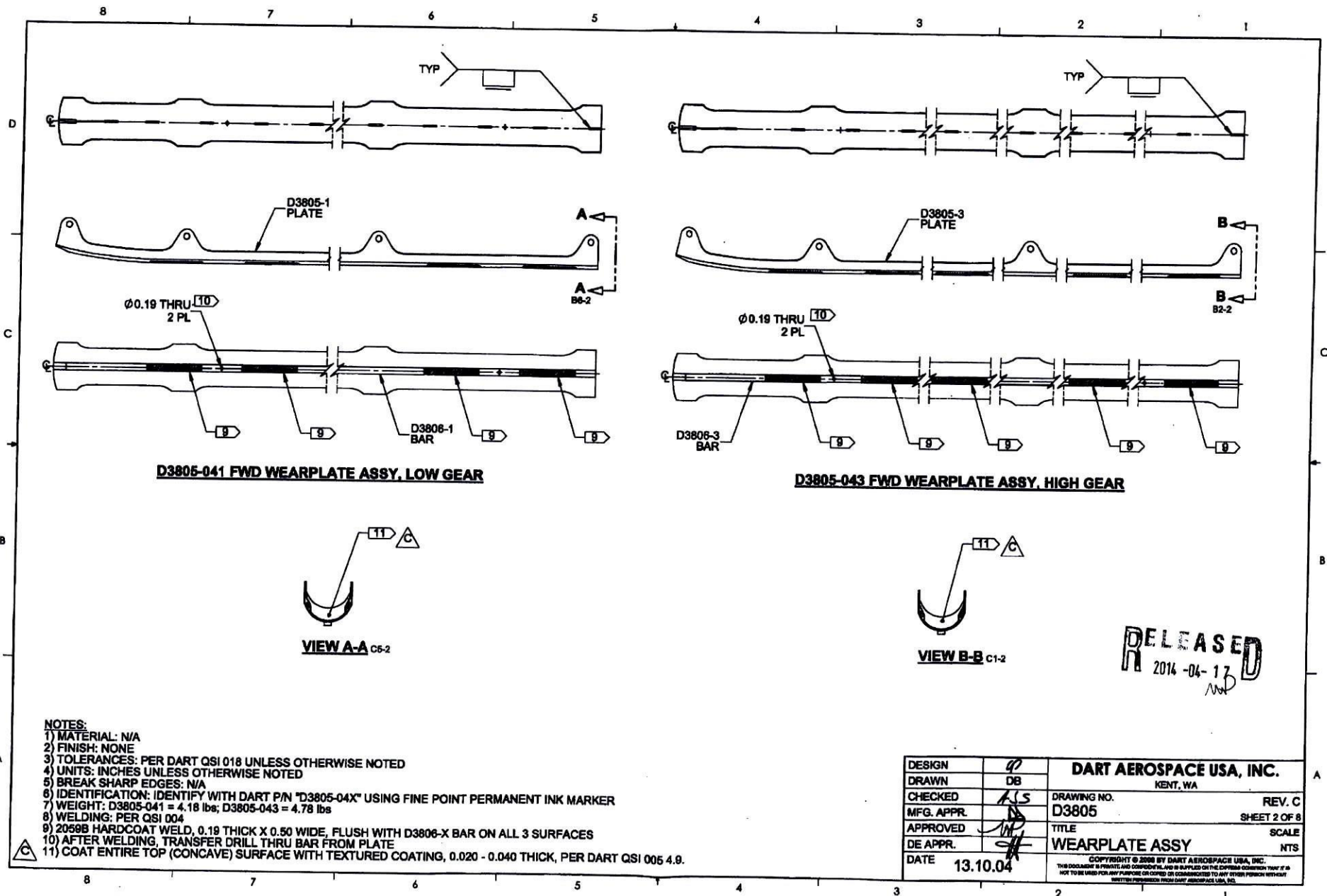
ITEM	QTY -041	QTY -043	QTY -045	QTY -047	P/N	DESCRIPTION
1	X				D3805-041	FWD WEARPLATE ASSY, LOW GEAR
2		X			D3805-043	FWD WEARPLATE ASSY, HIGH GEAR
3			X		D3805-045	AFT WEARPLATE ASSY, LOW GEAR
4				X	D3805-047	AFT WEARPLATE ASSY, HIGH GEAR
11	1				D3805-1	PLATE
12		1			D3805-3	PLATE
13			1		D3805-5	PLATE
14				1	D3805-7	PLATE
15	1				D3806-1	BAR
16		1			D3806-3	BAR
17			1		D3806-5	BAR
18				1	D3806-7	BAR
31	A/R	A/R	A/R	A/R	2059B	HARDCOAT

STOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 142907 MLC
16-03-14

RELEASED
2014-04-17

C	REMOVE ITEMS 19, 20, 21, 22 AND 32 FROM BOM (ZN C4-1), REVISE NOTE 11, SHEETS 2&3 (ZN A8-2, B2-2, B6-2, A8-3, B2-3, B6-3)	DB	13.10.04
B	REVISED D3805-1F/3F TO EASE MANUFACTURABILITY (ADDED CUTOOUT AT FWD END OF PLATE PER PAR11-106) AND RE-ORGANIZED NOTES SHEETS 2 & 3	MB	11.09.16
A	NEW ISSUE	MB	08.11.21
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE USA, INC.	
DRAWN	DB	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.		D3805	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		WEARPLATE ASSY	NTS
DATE	13.10.04	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1



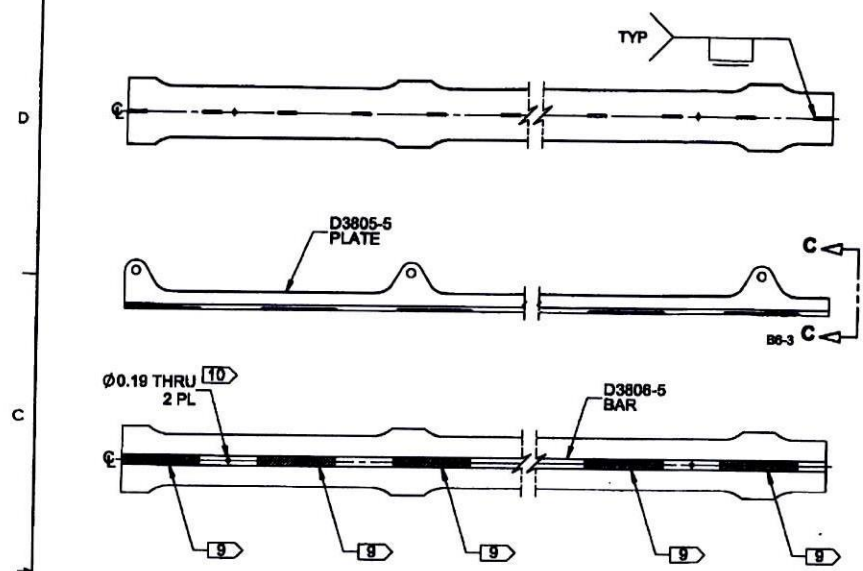
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3805-04X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3805-041 = 4.18 lbs; D3805-043 = 4.78 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.19 THICK X 0.50 WIDE, FLUSH WITH D3806-X BAR ON ALL 3 SURFACES
- 10) AFTER WELDING, TRANSFER DRILL THRU BAR FROM PLATE
- 11) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020 - 0.040 THICK, PER DART QSI 005 4.9.

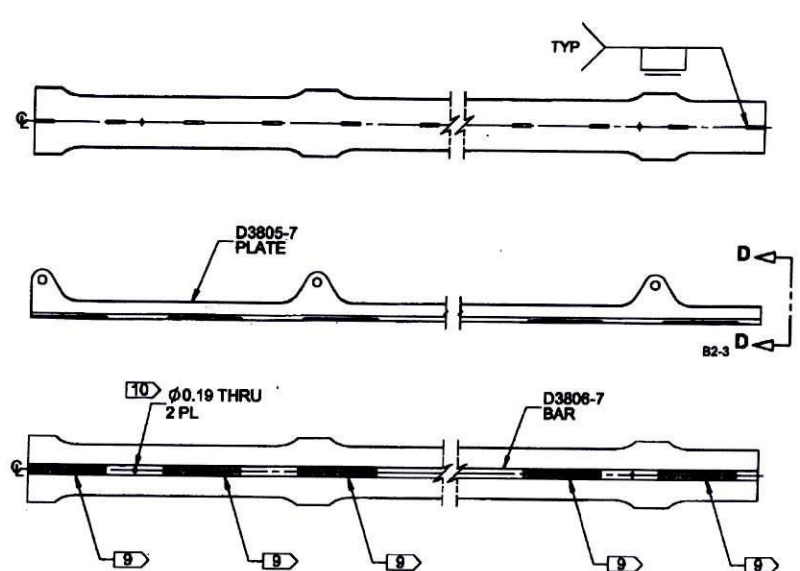
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CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	MP	D3805	SHEET 2 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	MP	WEARPLATE ASSY	NTS
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2014-04-13

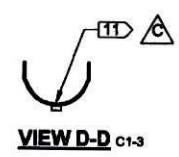
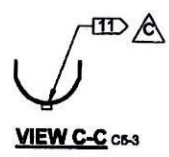
8 7 6 5 4 3 2 1



D3805-045 AFT WEARPLATE ASSY.



D3805-047 AFT WEARPLATE ASSY.



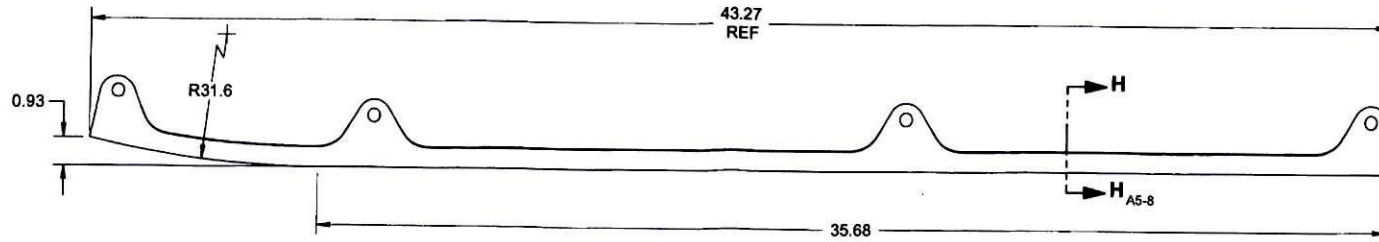
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2014-04-17

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3805-04X" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: D3805-045 = 4.24 lbs; D3805-047 = 4.53 lbs
 - 8) WELDING: PER QSI 004
 - 9) 2059B HARDCOAT WELD, 0.19 THICK X 0.50 WIDE, FLUSH WITH D3806-X BAR ON ALL 3 SURFACES
 - 10) AFTER WELDING, TRANSFER DRILL THRU BAR FROM PLATE
 - 11) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020 - 0.040 THICK, PER DART QSI 005 4.9.

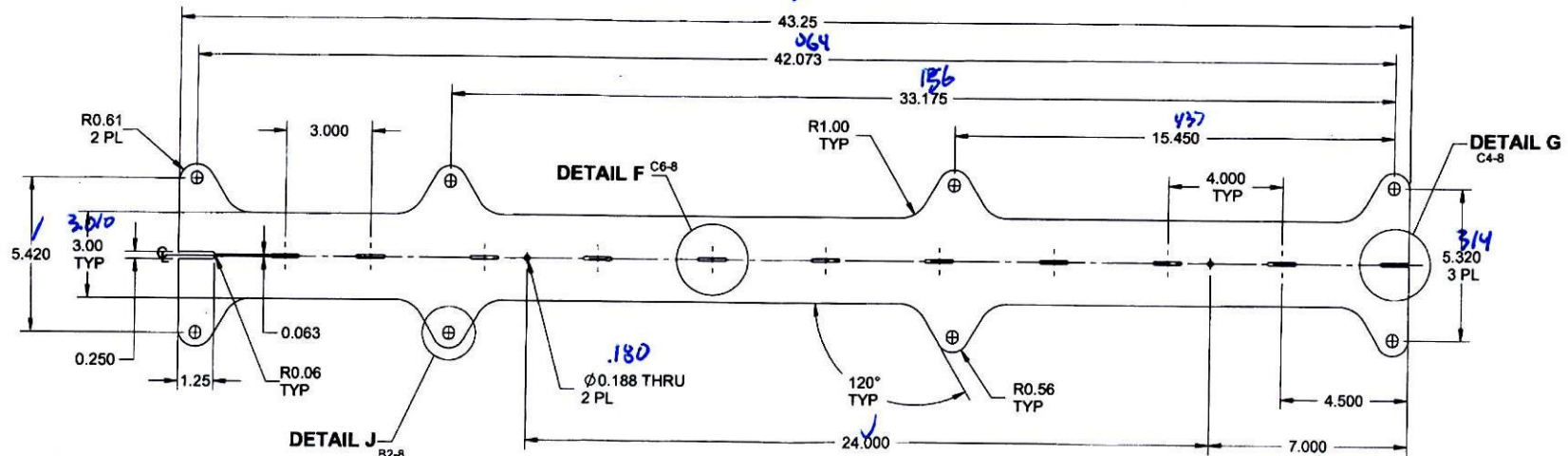
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CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	AS	D3805	SHEET 3 OF 8
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DE APPR.	AS	WEARPLATE ASSY	NTS
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8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



D3805-1 PLATE
(MAKE FROM D3805-1F)



D3805-1F PLATE

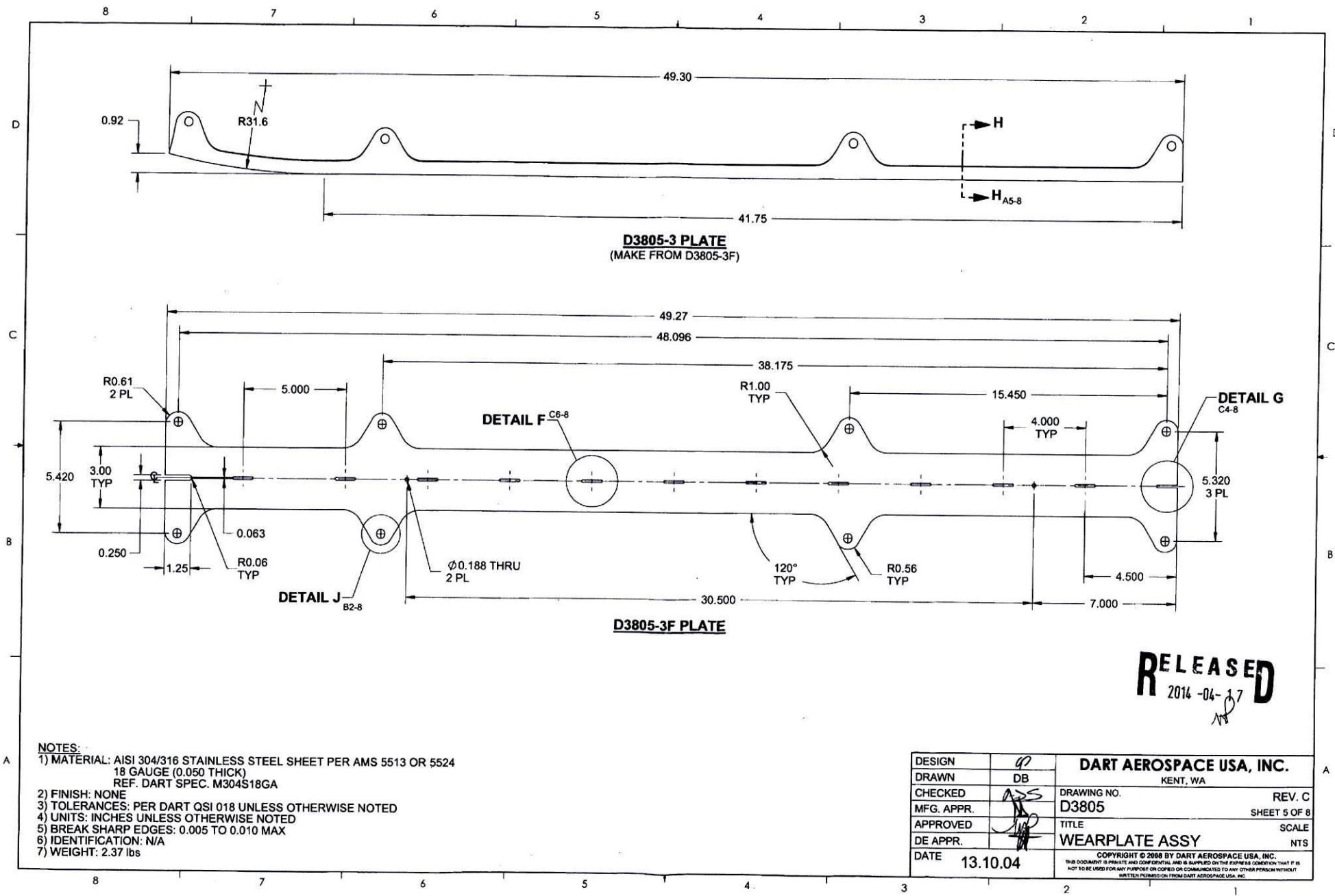
RELEASED
2014-04-17

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524
18 GAUGE (0.050 THICK)
REF. DART SPEC. M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.11 lbs

DESIGN	DB	DART AEROSPACE USA, INC.	
DRAWN	DB	KENT, WA	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.		D3805	SHEET 4 OF 8
APPROVED		TITLE	SCALE
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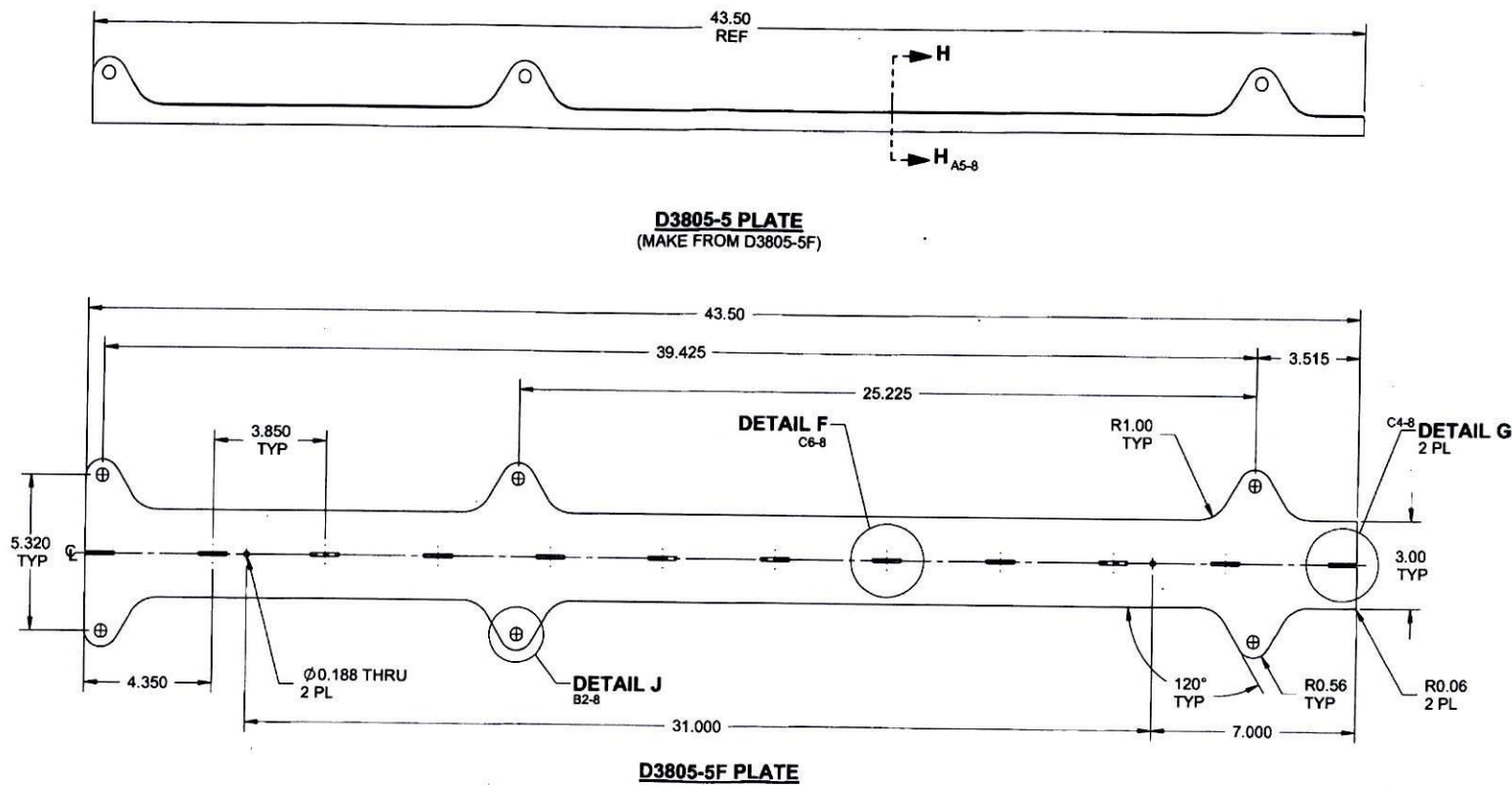
8 7 6 5 4 3 2 1



NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524
18 GAUGE (0.050 THICK)
REF. DART SPEC. M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.37 lbs

DESIGN	DB	DART AEROSPACE USA, INC.	
DRAWN	DB	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	AS	D3805	SHEET 5 OF 8
APPROVED	AS	TITLE	SCALE
DE APPR.	AS	WEARPLATE ASSY	NTS
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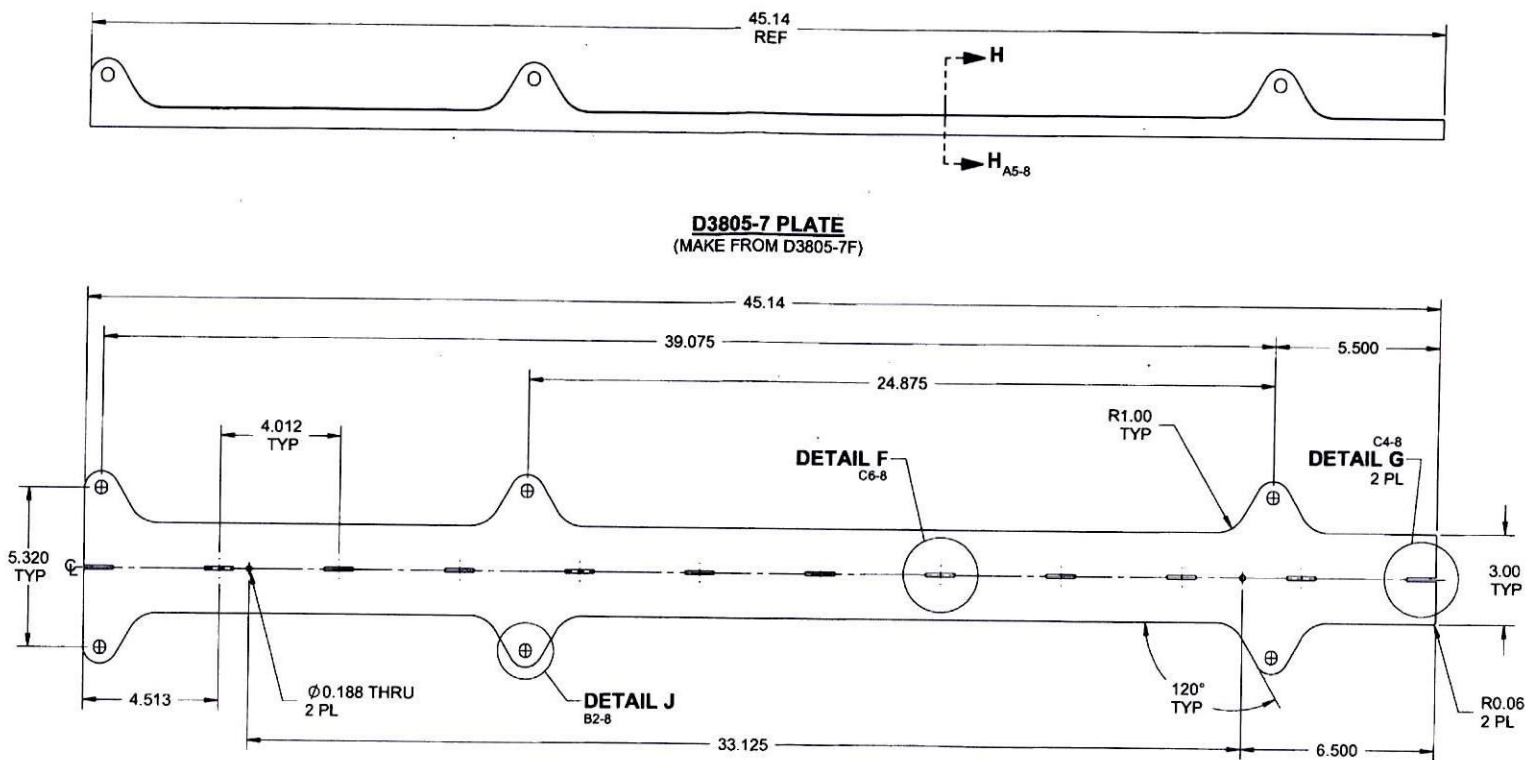


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2014-04-17

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524
18 GAUGE (0.050 THICK)
REF. DART SPEC. M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.06 lbs

DESIGN	DP	DART AEROSPACE USA, INC.	
DRAWN	DB	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	AS	D3805	SHEET 6 OF 8
APPROVED	AS	TITLE	SCALE
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D3805-7 PLATE
(MAKE FROM D3805-7F)

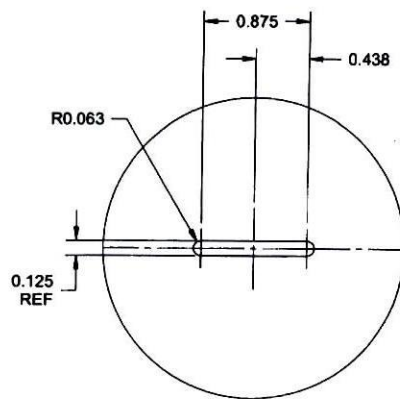
D3805-7F PLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524
18 GAUGE (0.050 THICK)
REF. DART SPEC. M304S18GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.13 lbs

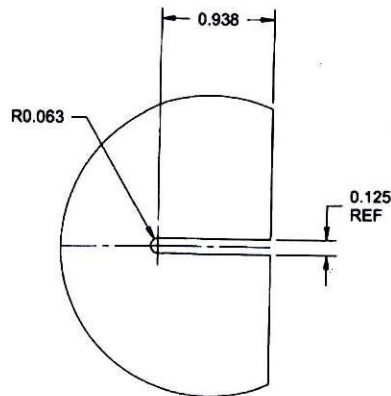
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DRAWN	DB	KENT, WA	
CHECKED	ASS	DRAWING NO.	REV. C
MFG. APPR.		D3805	SHEET 7 OF 8
APPROVED		TITLE	SCALE
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2014-04-17



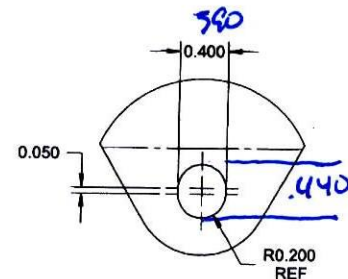
DETAIL F
SLOT DETAIL TYP
SCALE 4X

C5-4
C5-5
C4-6
C4-7



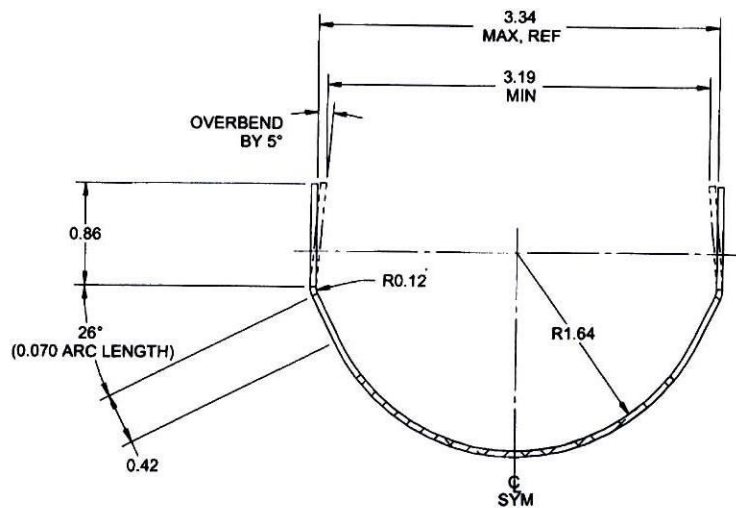
DETAIL G
SLOT DETAIL TYP
SCALE 4X

C1-4
C1-5
C1-6
C2-7



DETAIL J
SCALE 4X

B6-4
B7-5
B5-6
B5-7



SECTION H-H
SCALE 4X

D3-4
D3-5
D3-6
D3-7

RELEASED
2014-04-*p*
nm

DESIGN	<i>gp</i>	DART AEROSPACE USA, INC.	
DRAWN	DB	KENT, WA	
CHECKED	<i>ASS</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>[Signature]</i>	D3805	SHEET 8 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	WEARPLATE ASSY	NTS
DATE	13.10.04	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31764**

Purchase Order Date 3/21/2016

PO Print Date 3/21/2016

Page Number 3 of 11

Order From :

VC-TPI001

TPI INDUSTRIES INC.
148 RUE GOODFELLOW
DELSON, QUEBEC J5B 1V4
CANADA

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 450-633-0484

Ship To Contact

Ship To Phone

Ship Via: —

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Total: \$42.00

6 D3805-1P Plate 4/6/2016
Yes
4/6/2016

8.00
Each

\$21.25 \$170.00

CUT AS PER DWG D3805 REV. C
B142907
MATERIAL 304 SHEET 18 GA

Sp/6-ou-7

Line Total: \$170.00

7 D4154-1P Plate 4/6/2016
Yes
4/6/2016

8.00
Each

\$34.80 \$278.40

CUT AS PER DWG D4154 REV. F
B143340
MATERIAL 304 SHEET 18 GA

Line Total: \$278.40

8 D4406-3P Plate 4/6/2016
Yes
4/6/2016

4.00
Each

\$27.30 \$109.20

CUT AS PER DWG D4406 REV. D
B143395
MATERIAL 304 SHEET 18 GA

Note:

3/21/2016

T.P.I. INDUSTRIES INC.

148 GOODFELLOW
DELSON, QUÉBEC J5B 1V4
CANADA
Tel: (450) 633-0484
Fax: (450) 633-0879

Packing Slip

Packing Slip No.: 7443
Date: 2016-04-05
Page: 1

Sold to:	Ship to:
Dart Aerospace Chantal Lavoie 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Dart Aerospace Chantal Lavoie 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 31764	Sold By: JONATHAN LESSARD
Shipped By:	Ship Date: 2016-04-05
Tracking No.:	

Item No.	Unit	Description	Quantity
d3805-1	Chaque	d3805-1 plate	8
d4154-1	Chaque	d4154-1 plate	8
d4406-3	Chaque	d4406-3 plate	4
d4771-1	Chaque	d4771-1 wearplate	4
d4772-1	Chaque	d4772-1 wearplate	4
d4773-1	Chaque	d4773-1 wearplate	4
d5152-1	Chaque	d5152-1 fwd post mount	28

SP/604-7

Comment: Net / 30 from date of invoice 2% svc. chg. on invoices over 30 days

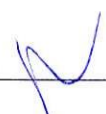
THYSSENKRUPP MATERIALS NA

DART AEROSPACE

STAINLESS STEEL SHEET 304L-2B DUAL GRADE
.0480 Nom X 48.0000" X 96.0000"
PART NO.

PO/Rel 31741

We certify that this is a true copy of the report
furnished by the producer of the metal, or data
resulting from tests made in approved labs.

Signed by: 

Certificate of Mill Test Results

BL PEC-983229-004

21Mar16

Pg 1/1



METALLURGICAL TEST REPORT

North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

740 Imperial Road North

Certificate: 121787 1

Mail To:

THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Ship To:

THYSSENKRUPP MATERIALS
2821 LANGSTAFF ROAD
CONCORD, ON L4K5C6

Date: 12/08/2015 Page: 1

Steel: 304/304L

Finish: 2B

Corrosion: ASTM A262/14; 18OBend-OK

Your Order: PEC271093

NAS Order: WN 0072789 01

PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, C.R. ANNEALED & PICKLED. UNS 30400/30403
ASTM A240/15a, A480/14b, A666/15; ASME SA240/13, SA480/13, SA666/13
CHEM ONLY ON FOLLOWING ASTM: A276/13, A479/13a, A484/13a, A312/13
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513J XMRK; MIL-5059D AMD3(X CRN MEAS); MIL-4043B
NACE MR0175/ISO 15156-3:2009 A, MR0103/07; Q9766D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DFARS Compliant

Product Id	Coil #	Skid #	Thickness	Width	Weight	-----Length-----	Mark	Pieces	Commodity Code
05X0L3 AA	05X0L3 A		.0460	48.0000	5.060	SHEETS	096.00	81	

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323

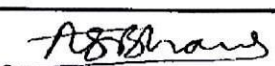
Chemical Analysis per ASTM A751/08

HEAT	CM	C %	CR %	CU %	MN %	MO %	N %	NI %	P %	S %
X0L3	US	.0214	18.0480	.4390	1.8095	.3690	.0812	8.0010	.0330	.0010
SI %										
.2980										

MECHANICAL PROPERTIES

Product Id#	Coil #	1 d o i c r	UTS KSI	20C .2% YS KSI	20C ELONG %-2"	Hard RB	Tail Hard
05X0L3 AA	05X0L3 A	F T	99.26	53.12	48.68	88.00	87.00

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr. 

ART TEST DUAVE 12/08/2015